

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT
NSPS SOURCE -- REVISED

PERMITTEE

Kropp Forge Division
Park-Ohio Forged & Machined Products
Attn: Ron Wilson
5301 West Roosevelt Road
Cicero, Illinois 60804

<u>Application No.:</u> 74090033	<u>I.D. No.:</u> 031051ABJ
<u>Applicant's Designation:</u> IEPAAP981	<u>Date Received:</u> June 12, 2002
<u>Subject:</u> Forging Plant	
<u>Date Issued:</u> September 10, 2002	<u>Expiration Date:</u> March 11, 2004
<u>Location:</u> 5301 West Roosevelt Road, Cicero	

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of two gas-fired boilers, forty-two process furnaces, several small combustion emission units, one chemical milling acid tank with separator, and one quench tank pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for nitrogen oxides (NO_x)). As a result the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permits issued for this location.
- 2a. The Nebraska boiler is subject to a New Source Performance Standard (NSPS) for Industrial - Commercial - Institutional Steam Generating Units, 40 CFR 60, Subpart A and Db. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States EPA under a delegation agreement.
- b. At all times, the Permittee shall, to the extent practicable, maintain and operate the boilers, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.
- c. The Permittee shall fulfill applicable notification and recordkeeping requirements of the NSPS, 40 CFR 60.7 and 60.49b.

- 3a. Natural gas shall be the only fuel fired in the boilers.
- b. Natural gas consumption in the heat generating equipment and emissions of the nitrogen oxides (NO_x) shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Natural Gas Consumption</u>		<u>Emission Factor</u>	<u>NO_x Emissions</u>	
	<u>(mmscf/Mo)</u>	<u>(mmscf/Yr)</u>	<u>(Lb/mmscf)</u>	<u>(T/Mo)</u>	<u>(T/Yr)</u>
Two Boilers (Total)	50	400	200	5.0	40.0

These limits define the potential emissions of the nitrogen oxides (NO_x) and are based on the actual emissions determined from maximum natural gas consumption and the standard maximum emission limit.

- c. The Nebraska boiler is limited to 60 mmBtu/hr. Firing rates above this level require additional testing.
 - d. The Zurn boiler is limited to 3,000 hours/year.
 - e. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months.
4. Emissions and operations of the 42 process furnaces and miscellaneous combustion equipment (< 10 mmBtu/hour) shall not exceed the following limits:

Natural gas usage of 65.0 mmscf/month and 650 mmscf/year.

<u>Pollutant</u>	<u>Emission Factor</u>	<u>Emissions</u>	
	<u>(Lb/mmscf)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
NO _x	100	3.25	32.50
CO	84	2.73	27.30
PM	7.6	0.247	2.47
VOM	5.5	0.179	1.79
SO ₂	0.6	0.0195	0.195

This table defines the potential emissions of the equipment and is based on the actual emissions determined from maximum natural gas consumption and standard emission factors.

5. The Permittee shall maintain monthly records of the natural gas consumption (mmscf/month, mmscf/year).
 - a. For the Nebraska and Zurn Boilers.
 - b. For the process furnaces and miscellaneous combustion equipment.
6. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records

retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

7. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.
8. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016

9. The Permittee shall submit the following additional information with the Annual Emissions Report, due May 1st of each year: natural gas consumption (mmscf/yr). If there have been no exceedances during the prior calendar year, the Annual Emission Report shall include a statement to that effect.

Please note that this permit is revised to correct the allowable NO_x emission rate in Condition 3(b), and the emission rate in Condition 4.

If you have any questions on this, please call John Blazis at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:JPB:psj

cc: Illinois EPA, FOS Region 1
Illinois EPA, Compliance Section
USEPA

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the forging plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. This is a usage of 10.5 million therms of natural gas in the boilers and furnaces per year. The resulting maximum emissions are well below the levels, e.g., 100 tons per year of NO_x at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less fuel is used and control measures are more effective than required in this permit.

1. Emissions from the boilers (50 mmscf/month and 400 mmscf/year):

<u>Pollutant</u>	<u>Emission Factor (Lb/mmscf)</u>	<u>Emissions</u>	
		<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
NO _x	200	5.00	40.0
CO	84	2.10	16.80
PM	7.6	0.19	1.52
VOM	5.5	0.14	1.10
SO ₂	0.6	0.015	0.12

This table defines the potential emissions of the boilers and is based on the actual emissions determined from maximum production rate, the fuel fired and standard emission factors.

2. Emissions and operations of the 42 process furnaces and miscellaneous combustion equipment (< 10 mmBtu/hour) shall not exceed the following limits (Natural gas usage of 65.0 mmscf/month and 650 mmscf/year):

<u>Pollutant</u>	<u>Emission Factor (Lb/mmscf)</u>	<u>Emissions</u>	
		<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
NO _x	100	3.25	32.50
CO	84	2.73	27.30
PM	7.6	0.247	2.47
VOM	5.5	0.179	1.79
SO ₂	0.6	0.0195	0.195

This table defines the potential emissions of the equipment and is based on the actual emissions determined from maximum gas consumption and standard emission factors.

3. The furnace burnoff of grease and oil from the bar stock based on a maximum of 0.2% by weight is limited to 3.5 tons/year each of VOM and PM₁₀.
4. Quench tank maximum VOM emissions are 0.1 lb/hour and 0.44 ton/year.

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